

improving physicians' confidence. The use of standardized role-playing will allow trainees to apply techniques and information in a safe setting prior to confronting these issues with actual patients.

As primary care providers, we are not expected to conduct intensive interventions when sexual concerns arise. Often brief interventions make significant impacts on our patients. A commonly used brief intervention is the PLISSIT model developed by Annon,¹⁰ with four progressive levels—(1) permission, (2) limited information, (3) specific suggestions, and (4) intensive therapy—that can guide assessments and interventions to improve sexuality in healthy and chronically ill patients. Broaching the topic of sexuality often gives patients permission to discuss their concerns and can be all that is needed to overcome barriers to healthy sexuality.

The conspiracy of silence around sexuality in the chronically ill and disabled is harmful and unnecessary. Increasing our comfort in discussing sexuality and routinely including sexual histories in our assessments will allow our patients to have more fulfilling lives.¹¹

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Preventing fractures among people with developmental disabilities

Identifying high-risk individuals could reduce fractures

People with developmental disabilities have a high risk of osteoporotic fractures due to a number of conditions that both diminish attainment of peak bone mass and/or increase susceptibility to falls. Most importantly, many of these factors represent modifiable risk factors and provide opportunities for prevention. An article recently published in this journal showed that adults with developmental disabilities residing in a developmental center in California had an increased rate of fracture (5.2 per 100 person-years) compared to the US population.¹ In this three-and-one-half-year study, an increased odds ratio of fracture was associated with age, white race, male gender, coexisting epilepsy, documented osteoporosis, and ambulatory status. Clearly the frequency of osteoporotic fractures in people with developmental disabilities underscores the importance of offering preventative measures.

With more therapeutic options for the prevention and treatment of osteoporosis, clinicians have expanded their view of the population at risk for osteoporotic fractures. In addition to postmenopausal women and octogenarians, we now contemplate surveillance and preventative therapies in patients on chronic oral glucocorticoid therapy,^{2,3} patients undergoing pulmonary,⁴ cardiac,⁵ and renal transplants,⁶ and men and women with syndromes of catabolic wasting. Recent clinical trials have demonstrated the efficacy of prophylaxis to prevent osteoporosis and reduce fracture risk in groups other than the postmenopausal women. Thus one could argue that, like other high-risk populations, people with developmental disabilities could be an important target for early diagnosis and treatment.

Once clinicians assess bone mineral density with densitometry and/or biochemical markers of bone turnover,

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they can institute antiresorptive therapies to reduce the personal and economic burden of osteoporotic fractures. It is well recognized that fracture incidence is the product of dual risk profiles: bone mineral density and propensity for falls.

People who have developmental disabilities and are mobile share with aging men factors that can increase the probability of falling: balance impairment because of intrinsic motor coordination difficulties, an increased possibility of dizziness, hypotensive episodes secondary to medication use, and potential for loss of muscle bulk, hypotonia, and generalized loss of muscle strength.

The increased risk of bone density abnormalities in individuals with developmental disabilities is less obvious and can result from factors that influence either the attainment of peak bone mass or the probability of increased bone resorption. People with developmental disabilities often experience coexisting conditions that affect bone mineral content, including hypogonadotropic hypogonadism, growth hormone deficiency, Turner's syndrome, and thyroid abnormalities. Many are on drugs that reduce bone mineral density as well, including (1) psychotropic medications used for behavioral modulation, which cause dysregulation of the hypothalamic-pituitary-gonadal axis (presumably, by dopaminergic activity); and (2) drugs to treat epilepsy, which can either have adverse effects on bone mineral density and ultimately reduce osteoblast function and bone formation or promote increased bone resorption, further compromising skeletal health.⁷ In the Lohiya et al. study¹, epilepsy was present in 30% of the study pop-

ulation and was thought to contribute to fracture morbidity. Dietary deficiencies and mobility impairment may further compromise the attainment of peak bone mass during critical years of bone formation. Inadequate exposure to sunlight in certain populations of institutionalized adults may contribute to vitamin D deficiency syndromes.

There is undoubtedly a critical need to evaluate residents systematically at developmental centers and to identify those people with bone mineral density abnormalities who might benefit from preventative therapies. In the current era of widely available diagnostic tests and well-tolerated therapies, any other strategy would be contrary to the consciousness and conscience of the caring physician and the prevailing precepts of public health.

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WJM focuses on adolescent health care

A call for papers

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The 36 million adolescents (10 to 19 years old) in the United States make up almost 14% of the total population. Although adolescents are in general healthy, roughly one fifth have some type of health problem. They are a unique group in terms of development and healthcare concerns, caught betwixt and between. Teens are beyond many of the acute illnesses of childhood and are only beginning to be affected by the chronic disorders of adulthood. Most of their health concerns are related to behavioral and environmental causes and are potentially preventable. Many practitioners may not realize recent trends.¹

Demographic

Among the adolescent population in the United States, there is an increase in the total number of those living in single-parent families, those living in poverty, and those of minority status.¹

Healthcare utilization

Teens utilize fewer healthcare services than any other group. They are the least likely to have health insurance.¹

Mortality

Accidents, unintentional injuries, homicides, and suicides account for the greatest number of deaths among adolescents in the United States. Males die more often than females. Black males from 15 to 19 years old are 9 times more likely to die from homicides than are white males of the same age.¹

Risk-taking

Adolescents are initiating risky behaviors at progressively earlier ages. Although over one third of high school students report being drunk in the past 30 days, teenage substance use² and smoking³ have decreased somewhat, reversing the upward trend throughout most of the